UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,127	06/26/2003	Angelina McMullin	END903009US1	5527

30400 7590 04/23/2010
HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 COLUMBIA CIRCLE
ALBANY, NY 12203

EXAMINER	
CAMPBELL, JOSHUA D	
ART UNIT	PAPER NUMBER
2178	
MAIL DATE	DELIVERY MODE
04/23/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANGELINA MCMULLIN

Appeal 2009-004090
Application 10/607,127
Technology Center 2100

Decided: April 23, 2010

Before JOSEPH L. DIXON, JAY P. LUCAS, and THU A. DANG, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF CASE

Appellant appeals the Examiner's final rejection of claims 1-14, 19-27, and 29-37 under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

A. INVENTION

According to Appellant, the invention relates to a program interface that "encapsulates an existing spreadsheet, such that the spreadsheet itself is the calculation engine of the program" (Spec. 26).

B. ILLUSTRATIVE CLAIMS

Claim 1 is exemplary and reproduced below:

> 1. A method of facilitating development of programs, said method comprising:
>
> providing an interface of a program;
>
> including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; and
>
> displaying the output.

C. REJECTIONS

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Devine	US 2002/0095399 A1	Jul. 18, 2002
Mujica	US 2003/0117447 A1	Jun. 26, 2003

Becerra US 2003/0169295 A1 Sep. 11, 2003

Claims 1-14, 19-27, and 29-37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of Becerra, Devine, and Mujica.

II. ISSUES

Has the Examiner erred in concluding that the combined teachings of Becerra, Devine, and Mujica would have suggested "providing an interface of a program; [and] including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output" (claim 1), as Appellant contends?

III. FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Becerra

1. Becerra discloses a system that creates interactive graphics for variable input and output data, whereby the graphics behave in accordance with algorithms relating the input data to the output data (¶ [0008-0009]).
2. The system creates an interactive "control panel" by associating graphic components, such as "user interface elements" (e.g., sliders, buttons, and checkboxes) and charts, with input and output data of spreadsheets (¶ [0010-0011]).

3. "When cells are selected, any underlying algorithms or mathematical formulas associating input data values with output data values are automatically imported into the control panel file," and, "[t]hus, the algorithms and mathematical relationships originally created using the spreadsheet program are automatically replicated in the control panel file as a mathematical model of the relationship between selected input and output cells" (¶ [0011]).
4. The graphic components can be associated with the spreadsheet cells by an application program interface (API), which is provided by most spreadsheet programs "for interacting with the [spreadsheet] application and allowing other applications to communicate with it" (¶ [0037]).
5. A user can associate a graphic component with a spreadsheet cell by either identifying the cell's sheet number, row, and column in a "Sheet Cell(s)" field of a "component properties dialog box" (¶ [0038] and Fig. 3) or by using a graphic pointer, e.g., a mouse, to point-and-click on a sheet number tab and then a cell (¶ [0039-0040] and Fig. 4).

Devine

6. Devine discloses a statistical process control (SPC) service that evaluates the condition of a workpiece and alerts a worker to production discrepancies (¶ [0007]).
7. "The SPC service has three parts: [a] machine operator is prompted to enter the values of certain measured parameters into certain cells in a spreadsheet (Retrieval)[; t]hese values then serve as inputs to certain statistical calculations within the spreadsheet, and a message is provided within another cell within the spreadsheet indicative of the

outcome of a statistical test (Analysis)[; and t]he contents of this cell are then published to any subscribers whenever a data value is entered in the spreadsheet by the operator (Report)" (¶ [0449]).

Mujica

8. Mujica discloses a spreadsheet application that allows the user to lock and unlock spreadsheet cells (Abstract; ¶ [0004]).

IV. PRINCIPLES OF LAW

Claim Interpretation

The claims measure the invention. *See SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). "[T]he PTO gives claims their 'broadest reasonable interpretation.'" *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). "Moreover, limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989)).

35 U.S.C. § 103(a)

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," and discussed circumstances in which a patent might be determined to

be obvious. *Id.* at 415 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416. The operative question is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at 417.

Analogous Art

"Under the correct analysis, any need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed." *KSR*, 550 U.S. at 420. "Two criteria are relevant in determining whether prior art is analogous: '(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.'" *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1351 (Fed. Cir. 2010) (quoting *In re Clay,* 966 F.2d 656, 658-59 (Fed.Cir.1992)).

V. ANALYSIS

In this Decision, we have considered only those arguments actually made by Appellant. Arguments which Appellant could have made but did not make in the Appeal Brief have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Claims 1, 4, 9-13, 19, 21, 24-26, 29, 31, and 34-37

As to independent claim 1, Appellant argues that the combined teachings of Becerra, Devine, and Mujica do not suggest "including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output" because "there is no teaching, suggestion or motivation to put a spreadsheet into the Becerra animation, if it could even be done" (App. Br. 12-13).

The Examiner finds that Becerra teaches an interface program "associated with spreadsheet execution," but acknowledges that "Becerra does not specifically teach that the spreadsheet itself is to execute its logic" (Ans. 4). The Examiner finds that Devine cures this deficiency by teaching "a spreadsheet statistical reporting method whereby a spreadsheet executes internal statistical calculations on inputs" (*id.*).

Thus, an issue we address on appeal is whether the Examiner erred in concluding that the combined teachings of Becerra, Devine, and Mujica would have suggested "providing an interface of a program; [and] including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output" (claim 1).

We begin our analysis by giving the claims their broadest reasonable interpretation. *See In re Bigio*, 381 F.3d at 1324. Furthermore, our analysis will not read limitations into the claims from the Specification. *See In re Van Geuns*, 988 F.2d at 1184.

Appellant appears to argue that the teachings of Becerra, Devine, and Mujica do not suggest "put[ting] a spreadsheet into" an interface or its program code. Such argument is not commensurate in scope with the language of claim 1. That is, claim 1 does not recite the spreadsheet as

being included within an interface or its program code. Nor does claim 1 recite the spreadsheet and interface as being part of the same program. Rather, claim 1 merely recites "providing an interface of a program," e.g., associated with a program, and "including in the program a spreadsheet." Thus, we broadly but reasonably construe the "interface" of claim 1 as being associated with a program "including" a spreadsheet.

Claim 1 does not recite any limitation on what a program "including" a spreadsheet means or represents. Thus, we broadly but reasonably construe the program of claim 1 as merely having a spreadsheet capability, e.g., encoding and/or operating the spreadsheet.

Claim 1 also does not recite any limitation on the spreadsheet itself, other than reciting that it "is to execute logic of the spreadsheet in response to data of the interface to produce output. The "is to" claim language represents a mere intended use of the spreadsheet. That is, since the "is to execute logic" feature is not positively recited as being performed, the spreadsheet of claim 1 is not required to actually "execute logic." Thus, we broadly but reasonably construe the spreadsheet as being capable of executing logic and producing an output in response to data of the interface.

Given the above claim constructions, we interpret "providing an interface of a program; [and] including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output" (claim 1) as reading on, but not limited to, the providing of any interface that is associated with a spreadsheet application, where an included spreadsheet of the spreadsheet application (e.g., encoded and/or operated by the spreadsheet application) is capable of executing logic and producing an output in response to data of the interface.

Becerra discloses a system for creating graphic representations of input and output data (FF 1). The system creates a control panel of interactive graphic components, e.g., sliders and charts, by associating those components with spreadsheet cells (FF 2). Any relationships between the input and output values of the spreadsheet cells are replicated as mathematic models of the control panel (FF 3). Because Becerra's system accesses the spreadsheet via the spreadsheet application (FF 4), an artisan would have understood Becerra's control panel as being an interface associated with a spreadsheet application. Further, because input values, output values, and mathematical models are imported from the spreadsheet to the control panel (FF 4), an artisan would have understood the spreadsheet as being capable of executing logic and producing an output in response to data of the control panel. Thus, Becerra discloses an interface that is associated with a spreadsheet application, where an included spreadsheet (e.g., encoded and/or operated by the spreadsheet application) is capable of executing logic and producing an output in response to data of the interface.

Devine discloses a statistical process control (SPC) service that evaluates production quality (FF 6). The SPC service has three parts: a measured value is entered into a spreadsheet cell; the measured value is thereby input to "statistical calculations within the spreadsheet;" and an outcome is provided to another spreadsheet cell (FF 7). Thus, like Becerra, Devine discloses a spreadsheet that is capable of executing logic and producing an output.

The creation of an interface by importing input data and logic of a spreadsheet (as in the creation of Becerra's control panel), where the spreadsheet is capable of executing logic and producing an output in

response to such input data (as in Becerra's or Devine's spreadsheet), is no more than a simple arrangement of old elements with each performing the same function it had been known to perform. *See KSR*, 550 U.S. at 417. We therefore conclude that the combined teachings of Becerra, Devine, and Mujica would have suggested "providing an interface of a program; [and] including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output" (claim 1).

Appellant also argues that the combined teachings of Becerra, Devine, and Mujica would not have suggested "wherein the spreadsheet of the program is unchangeable by a user" (claim 1) because "importing the concept of locking data cells from Mujica into Becerra would result in the Becerra input data controls not being able to change the input within the predetermined range, which goes against the teaching of Becerra" (App. Br. 13). Contrary to Appellant's argument, only some of Becerra's graphic components allow the user to vary an input within a predetermined range (e.g., sliders), while others merely turn an input on or off (e.g., buttons and checkboxes) (FF 2). An artisan would have understood that such other on/off components can be associated with the fixed values of locked spreadsheet cells.

Appellant further argues that Becerra, Devine, and Mujica are not analogous art. Becerra's importing of spreadsheet data and replicating of spreadsheet logic (FF 2) are both applicable to the claimed invention's field of computer programming (App. Br. 10). Devine and Mujica address spreadsheet functionalities, i.e., calculations and cell locking, respectively (FF 7-8), that are pertinent to the spreadsheet functions recited by claim 1. We therefore conclude that Becerra's teachings are within the claimed

invention's field of endeavor; and Devine's and Mujica's teachings are reasonably pertinent to a problem with which the claimed invention is involved. *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1351 (Fed. Cir. 2010) (quoting *In re Clay,* 966 F.2d 656, 658-59 (Fed.Cir.1992)).

Accordingly, for the above reasons, we affirm the rejection of claim 1 and dependent claims 4 and 9-13 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica. As Appellant presents similar arguments for independent claims 19 and 29, we also affirm the rejection of those claims, and dependent claims 21, 24-26, 31, and 34-37 falling therewith, under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

Claims 2, 20, and 30

Appellant contends that the applied art does not suggest "wherein the spreadsheet of the program is hidden from the user" (claim 2) because "even if for the sake of argument we assume that Devine teaches hiding the spreadsheet, it makes no sense to do so in Becerra, since Becerra codes the spreadsheet logic into the control panel" (App. Br. 14). We agree with Appellant that Becerra codes the spreadsheet into the control panel (FF 2-3), but find that the spreadsheet is thereby hidden from the user.

Accordingly, we affirm the rejection of claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica. As Appellant presents similar arguments for claims 20 and 30 (App. Br. 14), we also affirm the rejection of those claims under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

Claim 3

Appellant contends that the applied art would not have suggested "wherein having the spreadsheet execute logic of the spreadsheet avoids re-coding of logic of the spreadsheet" (claim 3) because Becerra teaches recoding the spreadsheet logic into the control panel (App. Br. 15). As Becerra teaches that the spreadsheet logic is "automatically replicated in the control panel file" (FF 3), we agree with Appellant's argument.

Accordingly, we reverse the rejection of claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

Claim 5

Appellant contends that the applied art would not have suggested "creating an input section of the interface based on an input tab of the spreadsheet; and creating an output section of the interface based on a results tab of the spreadsheet" (claim 5) because the cited tabs of Becerra's Fig. 4 "are part of the spreadsheet itself from which data cells are taken" and not part of the interface (App. Br. 16). Appellant further contends that "the tabs in the spreadsheet from which Becerra imports data, formulas and algorithms are simply worksheet tabs (i.e., sheet 1, sheet 2, etc.), and not input-output tabs" (Reply Br. 7).

Claim 5 does not recite any limitation on what "input tab" and "output tab" mean, include, or represent, other than that they are tabs of the spreadsheet and that the "input section" and "output section" of the interface are respectively "based on" those tabs. We therefore interpret claim 5 as reading on, but not limited to, creating input and output components of the interface based on tabs of the spreadsheet. An artisan would have understood Becerra's system as creating the graphic components of the

control panel, for both input and output data, by pointing-and-clicking ("based on") on respective sheet tabs and cells of the spreadsheet (FF 2 and 5).

Accordingly, we affirm the rejection of claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

Claims 6, 22, and 32

Appellant contends that the applied art would not have suggested "wherein the including comprises enabling interaction between the interface and the spreadsheet" (claim 6) because "associating a component of the control panel with a cell of the spreadsheet is simple [sic] not the same as interaction between a spreadsheet and the interface" (App. Br. 16).

Claim 6 simply does not recite any limitation on what "enabling interaction" means, includes, or represents, other than that "interaction" would occur "between the interface and the spreadsheet." An artisan would have understood association of Becerra's control panel components with spreadsheet cells to be an "interaction between the interface and the spreadsheet" (claim 6), especially in view of Becerra's statement that the graphic components are associated with spreadsheet cells by way of "an application program interface (API) for interacting with the [spreadsheet] application" (FF 4; emphasis added).

Accordingly, we affirm the rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica. As Appellant presents similar arguments for claims 22 and 32 (App. Br. 16), we also affirm the rejection of those claims under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

Claims 7, 8, 23, and 33

Appellant contends that the applied art would not have suggested "wherein the enabling interaction [of claim 6] comprises providing to the spreadsheet one or more inputs from the interface" (claim 7) because "Becerra ... indicates that no inputs from the interface (i.e., the control panel) are provided to the spreadsheet," but rather "input data and other information in spreadsheet cells are provided to the control panel originating from the spreadsheet" (App. Br. 17). The Examiner responds that Becerra's input components provide association data to the spreadsheet (Ans. 18). However, the Examiner does not cite any teaching of Becerra in support of that contention.

Accordingly, we reverse the rejection of claim 7 and its dependent claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica. As the Examiner rejects claims 7, 23, and 33 under the same rationale, we also reverse the rejection of claims under 23 and 33 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

Claims 14 and 27

Appellant contends that the applied art would not have suggested "replacing by other than the user one or more calculations of the spreadsheet and avoiding re-coding of the interface" (claim 14) because, though Becerra changes input values of the control panel (e.g., provides a slider to change input values), "[c]hanging the input data ... does not replace any calculations acting on the input data" (App. Br. 18). The Examiner finds that changing input values of a spreadsheet calculation suggests changing the spreadsheet calculation itself (Ans. 18). We agree with Appellant that

changing an input value of a calculation is different than replacing that calculation.

Accordingly, we reverse the rejection of claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica. As the Examiner rejects claim 27 under the same rationale (Ans. 10), we also reverse the rejection of claim 27 under 35 U.S.C. § 103(a) as being unpatentable over Becerra, Devine, and Mujica.

VI. CONCLUSIONS

(1) The Examiner did not err in concluding that claims 1, 2, 4-6, 9-13, 19-22, 24-26, 29-32, and 34-37 are unpatentable under 35 U.S.C. § 103(a) over the teachings of Becerra, Devine, and Mujica.

(2) The Examiner erred in concluding that claims 3, 7, 8, 14, 23, 27, and 33 are unpatentable under 35 U.S.C. § 103(a) over the teachings of Becerra, Devine, and Mujica.

(3) Claims 1, 2, 4-6, 9-13, 19-22, 24-26, 29-32, and 34-37 are not patentable.

VII. DECISION

We affirm the Examiner's rejection of claims 1, 2, 4-6, 9-13, 19-22, 24-26, 29-32, and 34-37 but reverse the Examiner's rejection of claims 3, 7, 8, 14, 23, 27, and 33 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

peb

HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 COLUMBIA CIRCLE
ALBANY, NY 12203